Applicant : Martin Erdtmann, et al.   Attorney's Docket No.: 13913-194001 / 2004P00047 US
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<u>Amendments to the Claims</u>:

      This listing of claims replaces all prior versions and listings of claims in the application:

<u>Listing of Claims</u>:

1.   (Currently Amended) A method comprising:

      ~~in a database,~~ maintaining a collection of documents ~~containing content~~, each of the documents ~~including a hyperlink to another document and~~ represented by a unique logical information object (LOIO), ~~each unique LOIO pointing to~~ one or more physical information objects (PHIOs) <u>belonging to each unique LOIO</u>, each of the PHIOs containing a variant of the content of [[a]] <u>the</u> document <u>represented by the PHIO's respective LOIO</u>~~, the variant being one of more attributes; and~~<u>;</u>

      <u>receiving a request for a first document in the collection and an entry context, the entry context specifying a respective value for each of one or more attributes;</u>

      determining a suitable PHIO <u>when</u>~~belonging to a~~ <u>first</u> LOIO ~~is response to a request~~<u>, the first document being represented by the first LOIO, the suitable PHIO having attribute values matching the context entry if such a PHIO belongs to the first LOIO, and if no such PHIO belongs to the first LOIO, the suitable PHIO having attribute values matching a derived context, the derived context being generated by one or more successive applications to the entry context of one or more successively selected maps selected from a plurality of maps, each application of a map mapping a first attribute value to a second attribute value in the entry context or a derived context; and</u>

      <u>providing the suitable PHIO in response to the request for the first document.</u>

2.   (Original) The method of claim 1 wherein the request is through a hyperlink.

3.   (Currently Amended) The method of claim 1 wherein the attributes include <u>one or more of</u> a name of a component, a version of the component, a language ~~of the document and~~/or a country ~~version of the document~~.

4.   (Currently Amended) The method of claim 1 wherein determining comprises:

~~receiving an entry context representing a desired set of values for one or more attributes;~~

generating a sequence of contexts from the entry context, each context in the sequence of contexts specifying a respective value for each of the one or more attributes;

determining a match of the entry context to one of the contexts in the sequence; and

returning a PHIO represented by the match.

5-8.   (Cancelled)

9.   (Currently Amended) The method of claim [[8]] 1 wherein the application of a map ~~set is characterized by maps that change~~ changes a single attribute value ~~and~~ or the application of a ~~maps~~ map ~~that change~~ changes a pair of attribute values, the ~~maps~~ map providing a dimension in which neighboring relations with respect to an attribute or a combination of attributes are defined.

10.   (Currently Amended) A computer program product, tangibly embodied in a machine-readable storage device ~~an information carrier, for maintaining a database~~, the computer program product being operable to cause data processing apparatus to:

maintain a collection of documents ~~containing content~~, each of the documents ~~including a hyperlink to another document and~~ represented by a unique logical information object (LOIO), ~~each unique LOIO pointing to~~ one or more physical information objects (PHIOs) belonging to each unique LOIO, each of the PHIOs containing a variant of the content of [[a]] the document represented by the PHIO's respective LOIO, ~~the variant being one of more attributes; and~~;

receive a request for a first document in the collection and an entry context, the entry context specifying a respective value for each of one or more attributes;

determine a suitable PHIO ~~when~~ belonging to a first LOIO ~~is response to a request~~, the first document being represented by the first LOIO, the suitable PHIO having attribute values matching the context entry if such a PHIO belongs to the first LOIO, and if no such PHIO belongs to the first LOIO, the suitable PHIO having attribute values matching a derived context, the derived context being generated by one or more successive applications to the entry context

of one or more successively selected maps selected from a plurality of maps, each application of
a map mapping a first attribute value to a second attribute value in the entry context or a derived
context; and

> provide the suitable PHIO in response to the request for the first document.

11.   (Original) The computer product of claim 10 wherein the request is through a hyperlink.

12.   (Currently Amended) The computer product of claim 10 wherein determining comprises:

> ~~receiving an entry context representing a desired set of values for one or more attributes;~~

> generating a sequence of contexts from the entry context, each context in the sequence of
contexts specifying a respective value for each of the one or more attributes;

> determining a match of the entry context to one of the contexts in the sequence; and

> returning a PHIO represented by the match.

13.   (Cancelled)

14.   (Currently Amended) The computer product of claim [[8]] 10 wherein the application of
a map ~~set is characterized by maps that change~~ changes a single attribute value ~~and~~ or the
application of a ~~maps~~ map ~~that change~~ changes a pair of attribute values, the ~~maps~~ map
providing a dimension in which neighboring relations with respect to an attribute or a
combination of attributes are defined.

15.   (Currently Amended) A system for maintaining a database, the system comprising:

> means for maintaining a collection of documents on a memory device ~~containing content,~~
each of the documents ~~including a hyperlink to another document and~~ represented by a unique
logical information object (LOIO), ~~each unique LOIO pointing to~~ one or more physical
information objects (PHIOs) belonging to each unique LOIO, each of the PHIOs containing a
variant of the content of [[a]] the document represented by the PHIO's respective LOIO, ~~the
variant being one of more attributes; and~~;

> means for receiving a request for a first document in the collection and an entry context,
the entry context specifying a respective value for each of one or more attributes;

means for determining a suitable PHIO ~~when~~ belonging to a first LOIO ~~is response to a request~~, the first document being represented by the first LOIO, the suitable PHIO having attribute values matching the context entry if such a PHIO belongs to the first LOIO, and if no such PHIO belongs to the first LOIO, the suitable PHIO having attribute values matching a derived context, the derived context being generated by one or more successive applications to the entry context of one or more successively selected maps selected from a plurality of maps, each application of a map mapping a first attribute value to a second attribute value in the entry context or a derived context; and

means for providing the suitable PHIO in response to the request for the first document.

16. (Original) The system of claim 15 wherein the request is through a hyperlink.

17. (Currently Amended) The system of claim 15 wherein the attributes include one or more of a name of a component, a version of the component, a language ~~of the document and/~~or a country ~~version of the document~~.

18. (Currently Amended) The system of claim 15 wherein the means for determining comprises:

~~receiving an entry context representing a desired set of values for one or more attributes;~~
means for generating a sequence of contexts from the entry context, each context in the sequence of contexts specifying a respective value for each of the one or more attributes;
means for determining a match of the entry context to one of the contexts in the sequence; and
means for returning a PHIO represented by the match.

19. (Cancelled)

20. (Currently Amended) The system of claim [[8]] 15 wherein the application of a map ~~set is characterized by maps that change~~ changes a single attribute value ~~and~~ or the application of a ~~maps~~ map ~~that change~~ changes a pair of attribute values, the ~~maps~~ map providing a dimension in

which neighboring relations with respect to an attribute or a combination of attributes are defined.